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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,533	12/05/2003	John Bruce Smith	3411-0103P	7332
2292	7590	08/18/2004	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			RINEHART, KENNETH	
			ART UNIT	PAPER NUMBER

3749

DATE MAILED: 08/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/727,533	Applicant(s) SMITH, JOHN BRUCE	
	Examiner Kenneth B Rinehart	Art Unit 3749	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1 and 2 is/are allowed.
- 6) ☒ Claim(s) 3-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/5/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 3-7, 11, 12, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Skolnik et al. Skolnik et al shows providing a furnace, heating a workpiece in said furnace for a time and at a temperature sufficient to heat said foreign material and a surface of said workpiece while preventing thermal migration to a core of said workpiece (col. 6, lines 4-10), said heating prevents deformation of said workpiece, said heating prevents degradation of thermal treatment parameters (fig. 1, fig. 2, col. 6, lines 7-8), said heating is flash heating (col. 6, lines 7-8), the heating follows a temperature curve from ambient to 900 F in about 30 seconds (col. 6, lines 7-8), providing a furnace, placing said workpiece within said furnace; heating said workpiece in said furnace for a time period and at a temperature so as to remove said foreign material while preventing deformation of said workpiece and preventing degradation of thermal treatment parameters of said workpiece, wherein thermal migration is prevented between a surface of said workpiece and a core of said workpiece, wherein the temperature is 900 F and the time period is approximately thirty seconds (fig. 1, fig. 2, col. 6, lines 4-1).

Claims 11 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Palmer. Palmer shows providing a furnace, placing said workpiece within said furnace; heating said workpiece in said furnace for a time period and at a temperature so as to remove said foreign

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material while preventing deformation of said workpiece and preventing degradation of thermal treatment parameters of said workpiece, wherein thermal migration is prevented between a surface of said workpiece and a core of said workpiece (col. 6, lines 21-25), said workpiece is an automobile part (col. 1, line 15).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Skolnik.

Skolnik discloses providing a furnace, placing said workpiece within said furnace; heating said workpiece in said furnace for a time period and at a temperature so as to remove said foreign material while preventing deformation of said workpiece and preventing degradation of thermal treatment parameters of said workpiece, wherein thermal migration is prevented between a surface of said workpiece and a core of said workpiece (fig. 1, fig. 2, col. 6, lines 4-1). Skolnik discloses applicant's invention substantially as claimed with the exception of said workpiece is an automobile part, the part is an automobile fender, the part is an automobile rim. At the time the invention was made it would have been an obvious matter of design choice to a person of ordinary skill in the art to have said workpiece is an automobile part, the part is an automobile fender, the part is an automobile rim because applicant has not disclosed that type of part provides an advantage, is used for a particular purpose or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform

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equally well with either the part of Skolnik or the claimed part because both parts perform the same function of having a substance removed from it equally well.

Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Palmer. Palmer discloses providing a furnace, placing said workpiece within said furnace; heating said workpiece in said furnace for a time period and at a temperature so as to remove said foreign material while preventing deformation of said workpiece and preventing degradation of thermal treatment parameters of said workpiece, wherein thermal migration is prevented between a surface of said workpiece and a core of said workpiece (col. 6, lines 21-25), said workpiece is an automobile part (col. 1, line 15). Palmer discloses applicant's invention substantially as claimed with the exception of the part is an automobile fender, the part is an automobile rim. At the time the invention was made it would have been an obvious matter of design choice to a person of ordinary skill in the art to have the part is an automobile fender, the part is an automobile rim because applicant has not disclosed that the type of part provides an advantage, is used for a particular purpose or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with either the part of Palmer or the claimed part because both parts perform the same function of having a substance removed from it equally well.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Skolnik in view of Bickell et al. Skolnik discloses providing a furnace, heating a workpiece in said furnace for a time and at a temperature sufficient to heat said foreign material and a surface of said workpiece while preventing thermal migration to a core of said workpiece (col. 6, lines 4-10). Skolnik discloses applicant's invention substantially as claimed with the exception of said

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heating is controlled by a programmed microprocessor for controlling time and temperature.

Bickell et al teaches said heating is controlled by a programmed microprocessor for controlling time and temperature (col. 3, lines 36-45) for the purpose of more effectively controlling the combustion process. It would have been obvious to one of ordinary skill in the art to modify Skolnik by including said heating is controlled by a programmed microprocessor for controlling time and temperature as taught by Bickell for the purpose of more effectively controlling the combustion process to reduce operating costs.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Skolnik in view of Domnitch. Skolnik discloses providing a furnace, heating a workpiece in said furnace for a time and at a temperature sufficient to heat said foreign material and a surface of said workpiece while preventing thermal migration to a core of said workpiece (col. 6, lines 4-10). Skolnik discloses applicant's invention substantially as claimed with the exception of the furnace is a mobile furnace. Domnitch teaches the furnace is a mobile furnace (abstract) for the purpose of handling local needs. It would have been obvious to one of ordinary skill in the art to modify Skolnik by including the furnace is a mobile furnace as taught by Domnitch for the purpose of handling local needs so that the overall usage of the furnace increases and a superior return on invested capital is achieved.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Skolnik in view of Jamaluddin. Skolnik discloses providing a furnace, heating a workpiece in said furnace for a time and at a temperature sufficient to heat said foreign material and a surface of said workpiece while preventing thermal migration to a core of said workpiece (col. 6, lines 4-10). Skolnik discloses applicant's invention substantially as claimed with the exception of the step of having a

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controlled cool down rate. Jamaluddin teaches the step of having a controlled cool down rate (fig. 8) for the purpose of preventing condensation. It would have been obvious to one of ordinary skill in the art to modify Skolnik by including the step of having a controlled cool down rate for the purpose of preventing condensation so that additional processing is unnecessary and the parts can more quickly and efficiently move to the next processing step thus reducing manufacturing costs.

Allowable Subject Matter

Claims 1 and 2 are allowed.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with respect to furnaces in general: Guttman (3830196), Kelly (4270898).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth B Rinehart whose telephone number is 703-308-1722. The examiner can normally be reached on 7:30 -4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira Lazarus can be reached on 703-308-1935. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KBR


KENNETH RINEHART
PRIMARY EXAMINER